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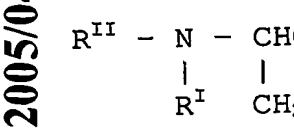
(54) Title: USE OF A DERIVATIVE OF ASPARTIC ACID AS A COLLECTOR IN FROTH FLOTATION PROCESSES



(I)

(57) Abstract: A derivative of aspartic acid is used as a collector for a phosphate containing mineral, such as apatite, in a froth flotation process. According to the invention the collector has a high selectivity for phosphate containing minerals even in the presence of carbonate minerals, such as calcite. The derivative has the formula (I) ,where R^I is a hydrophobic group containing a hydrocarbon group of 6-24 carbon atoms; R^{II} is an alkyl group with 1-7 carbon atoms or a group of the formula $(B)_yH$, in which B is an alkyleneoxy group with 2-4 carbon atoms and y is a number from 1 to 10; and M is a group selected from the group consisting of a cation or hydrogen. Methods for producing the derivative are also described.